

# Community Meeting Team Radford

5 September 2013

# AGENDA

- Introductions
- Ground Rules
- General Information about RFAAP
- Answers to questions posted in the past
- Questions
- Conclusion

# INTRODUCTIONS

## US Army

**LTC Luis A. Ortiz**

Commander, Radford Army Ammunition Plant (RFAAP)

**Rob Davie**

Chief, Operations Team, US Army, RFAAP

**Charlie Saks**

Public Affairs Officer, RFAAP

[Charles.e.saks3.civ@mail.mil](mailto:Charles.e.saks3.civ@mail.mil)

## BAE Systems

**Bob Winstead**

Environmental Manager, OSI

**Jay Stewart**

Environmental Manager, Radford

**Alicia Gray**

Community Relations, Radford

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# **GROUND RULES**

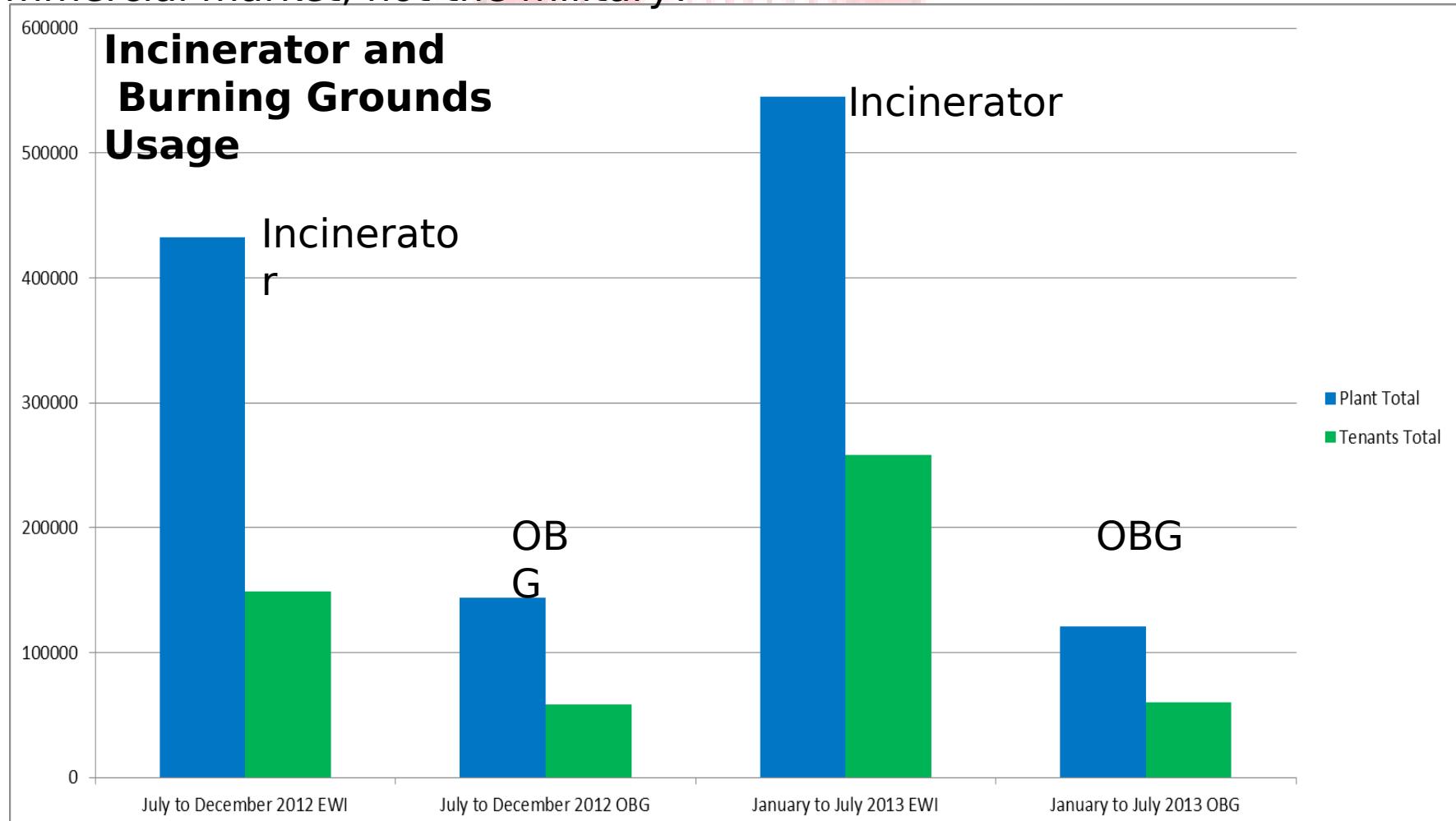
- Raise your hand
- Wait for the microphone
- Do not interrupt anyone speaking
- One question limit only
- Allow the panel the opportunity to answer the question
- Questions and answers will be posted on our web site, mailed to community members on the mailing list and briefly addressed at the next meeting in March 2014 here at the NRV Business Center.

# GENERAL RFAAP INFO

- ✓ Current Operating Contractor-BAE Systems
- ✓ Constructed in August of 1940 - completed in 9 months at a cost of \$40M
- ✓ Located on two sites - 6,821 Acres
  - Over 2,000 Buildings (active and inactive)
  - 214 Ammo storage buildings
- ✓ Personnel: 1 Military, 20 DA Civilians, 700 (+) contractors - peaked at 23,000 during WWII
  - 15 Armament Retooling and Manufacturing Support Act (ARMS) tenants, 1 Government tenant
- ✓ Significant Infrastructure
  - 16M gallons/day of filtered water (capacity up to 40M)
  - 3M gallons/day of drinking water
  - 23.5M pounds of steam
  - 59 miles of water lines - 67 miles of steam lines
  - Coal fired power house - 580K KWH/day of electricity,  $\frac{1}{2}$  of the Plant's requirements
  - 162 miles of roadway - 33 miles of rail lines
- ✓ Government Housing Area

## PAST QUESTIONS AND ANSWERS

Does BAE burn waste from ATK, Grucci Fireworks, and other tenants at the OBG? Is that waste from ATK the result of manufacturing ammunition for the commercial market, not the military?



BAE Systems is responsible for thermally treating all energetic material waste at RFAAP, including any tenant operations that create energetic waste.

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Radford Army Ammunition Plant  
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Telephone (540) 639-7631  
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June 28, 2013

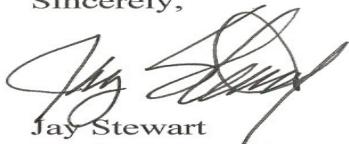
Dear Radford Community Member,

In November 2012, the Environmental Protection Agency (EPA) Region III revised their Regional Screening Level (RSL) for perchlorate from 26 µg/l to 11 µg/l. EPA Region III also stated in the November 2012 RSL Table and associated Frequently Asked Questions (FAQ) that EPA's Interim Drinking Water Health Advisory concentration of 15 µg/l is still recommended for use as the preliminary remediation goal for perchlorate.

This change by EPA Region III affects the groundwater monitoring conducted at the Open Burning Grounds at the Radford Army Ammunition Plant. In order to comply with the updated EPA Region III guidance for RSLs, BAE Systems requested that Permit Attachment VII.C. be modified to reflect the change in the RSL table for perchlorate to 15 ug/L.

This request was included in comments submitted to the Virginia Department of Environmental Quality and is shown in the final draft of the permit received June 18, 2013 by BAE Systems. If you have any questions, please contact Alicia Gray at [alicia.gray@baesystems.com](mailto:alicia.gray@baesystems.com), Charlie Saks at [charles.e.saks3.civ@mail.mil](mailto:charles.e.saks3.civ@mail.mil), or Russ McAvoy at [russell.mcavoy@deq.virginia.gov](mailto:russell.mcavoy@deq.virginia.gov).

Sincerely,



Jay Stewart  
Environmental Manager  
BAE Systems, Ordnance Systems Inc.

# PERCHLORATE

Method	Result	Units	MRL	Dilution	Analyzed	BLDG
EPA 331.0	ND	ug/L	0.5	1	6/15/2013	RP 9353
EPA 331.0	ND	ug/L	0.5	1	6/15/2013	RP 9353
EPA 331.0	ND	ug/L	0.5	1	6/15/2013	MONTGOMERY PUMP STATION
EPA 331.0	ND	ug/L	0.5	1	6/15/2013	MONTGOMERY PUMP STATION

***Radford Army Ammunition Plant***  
**PWSID # 1121643**

***2012 Consumer Confidence Report (Water Quality  
Report)***

- Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2012. In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:
- *Non-detects (ND) - lab analysis indicates that the contaminant is not present*
- *Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

# WATER QUALITY RESULTS

## Regulated Contaminants

Contaminant (units)	MCLG	MCL	Level Detected	Violation (Y/N)	Range	Date of Sample	Typical Source of Contamination
Nitrate + Nitrite (ppm)	10	10	1.10	N	ND – 1.10	2012	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alpha Emitters (pCi/L)	0	15	2.90	N	0.52 – 2.90	2012	Erosion of Natural Deposits
Combined Radium (pCi/L)	0	5	0.92	N	0.65 – 0.92	2012	Erosion of Natural Deposits
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.6	N	1.0 – 1.6	2012	Water additive used to control microbes
TOC [Total Organic Carbon]	NA	TT, met when $\leq$ 1; or when alternative compliance criteria is met*	0.56*	N	0.56 – 1.27	2012	Naturally present in the environment
HAA5s [Haloacetic Acids] (ppb)	NA	60	34	N	7.4 – 34	2012	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	NA	80	36	N	6.3 – 54	2012	By-product of drinking water disinfection
Turbidity (NTU)	NA	TT, 1 NTU Max	0.22	N	NA	2012	Soil runoff
		TT, $\leq$ 0.3 NTU 95% of the time	100%	N	N/A		
Barium (ppm)	2	2	0.0271	N	0.0266 – 0.0271	7/24/2012	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	120	N	120-130	7/10/2012	Erosion of natural deposits; Water additive which promotes strong teeth
Total Coliform Bacteria	0	1 positive monthly sample	1 positive	N	NA	2012	Naturally present in the environment

# **WATER QUALITY RESULTS**

## **Lead and Copper Contaminants**

<b>Contaminant (unit)</b>	<b>MCLG</b>	<b>Action Level</b>	<b>90<sup>th</sup> Percentile</b>	<b>Date of Sampling</b>	<b># of Sampling Sites Exceeding Action Level</b>	<b>Typical Source of Contamination</b>
Lead (ppb)	0	AL = 15	9.5	2012	3	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	0.100	2012	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

RAAP Bldg. 419 water system had a minimum TOC removal ratio (using the four quarter running annual averages) of 0.56 during the 4th quarter of 2012. However, the average treated water TOC was 0.64 mg/L for the 4<sup>th</sup> quarter running annual average. Therefore, the RAAP Bldg. 419 waterworks was in compliance with the treatment technique for control of disinfection byproduct precursors by meeting one of the alternative compliance criteria – having treated water TOC < 2.0 mg/L calculated quarterly as a running annual average.

The water quality results in the above table are from testing done in 2012. However, the state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

### **MCL VIOLATION INFORMATION**

No MCL violations for any contaminants occurred during the time period of January 1, 2012 through December 31, 2012 at the Radford Army Ammunition Plant Bldgs 419 and 474 as described in the Commonwealth of Virginia/State Board of Health Waterworks Regulations.

### **OTHER VIOLATION INFORMATION**

No other violations occurred during the time period of January 1, 2012 through December 31, 2012 at the Radford Army Ammunition Plant Bldgs 419 and 474 as

# QUESTIONS

- If you have any questions please contact your resources listed below



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